



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/692,296

10/23/2003

Mark Kinnell

1-24810

7344

4859

7590

04/18/2006

MACMILLAN SOBANSKI & TODD, LLC
ONE MARITIME PLAZA FOURTH FLOOR
720 WATER STREET
TOLEDO, OH 43604-1619

EXAMINER

LIN, SHEW FEN

ART UNIT

PAPER NUMBER

2166

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/692,296	Applicant(s) KINNELL, MARK	
	Examiner Shew-Fen Lin	Art Unit 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/23/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/29/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- a. This action is responsive to application filed on 10/23/2003, IDS filed on 12/29/2003.
- b. The application claims priority of continuation of PCT/GB02/01897 filed on 4/26/2002 and foreign priority 0110260.7 filed on 4/27/2001.
- c. Claims 1-32 are pending. Claims 1, 8, 16, 19, 21, 23, and 28 are independent claims.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Great Britain on 4/27/2001. It is noted, however, that applicant has not filed a certified copy of the 0110260.7 application as required by 35 U.S.C. 119(b).

Applicant is reminded that in order for a patent issuing on the instant application to obtain the benefit of priority based on priority papers filed in parent Application No. 0110260.7 on 4/27/2001 under 35 U.S.C. 119(a)-(d) or (f), a claim for such foreign priority must be timely made in this application. To satisfy the requirement of 37 CFR 1.55(a)(2) for a certified copy of the foreign application, applicant may simply identify the application containing the certified copy.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8, 16, and 18 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "the step of" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "said additional textual data" in the last paragraph. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "said additional text" in lines 14-15 . There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Addison et al. (European Patent Publication, EP 0597630 A1, hereinafter referred as Addison).

As to **claim 1**, Addison discloses a method for data management permitting selective access to a database by subject and/or data grouping (query text document by concept, Figure 1, page 5, line 35, lines 45-46), the method comprising:

a) providing at least one database to which access is to be provided by subject or data grouping (access/index document by concept, Figure 2, page 7, lines 46-47);

b) providing data processing means adapted to provide access to said database (natural language/concept query, page 5, lines 38-41);

c) providing access instruction means adapted to permit instructions to be provided to said data processing means for said access, and causing same to instruct said data processing means accordingly (accept query and execute searches, Figure 1, page 6, line 42); and

d) causing said data processing means to match said instructions with data items stored in said database to permit said matched data items to be identified for retrieval (results of text searching are retrieved and displayed, page 5, lines 50-52); wherein

e) said step of causing said access instruction means to instruct said data processing means being accompanied by the steps of data processing of said instructions and either then or previously of said database data or of a reference portion thereof to facilitate said matching of said instructions with said data items (query textual data is processed for natural language query, Figure 6, page 12, lines 50-51);

f) said data processing of said instructions and of said database data comprising the steps of: i) taking textual data from said instructions and from said database (capture natural language query from user, Figure 6, page 12, lines 54-57); ii) subjecting said textual data to analysis with

Art Unit: 2166

respect to subject matter by a series of steps providing a degree of word sense disambiguation (use the same process applied to concept indexing for query textual data, page 12, lines 50-51, page 7, lines 15-36); and

g) and said steps being performed at least in part in relation to said data items stored in said database by reference to said textual data after said analysis with respect to subject matter (retrieve text relevant to subject domain of the query, Figure 6, page 12, lines 43-49, page 13, line 5).

As to claim 2, Addison discloses the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means (page 7, lines 5-7) and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data (page 7, lines 8-11).

As to claim 3, Addison discloses said step of subjecting said textual data to analysis with respect to subject matter being adapted to identify single concepts (use least frequency word sense for query (single concept), page 10, lines 30-33) in said instructions and in said database and being adapted to seek matches there-between (obtain list of document, page 10, lines 30-33).

As to claim 4, Addison discloses said step of matching said instructions with said data items comprising identifying one or more text locations within said database where matches with respect of said single concept are located (page 13, lines 10-12).

As to claim 5, Addison discloses said step of subjecting said textual data to analysis with respect to subject comprising use of algorithms adapted to determine a degree of the sense in which a word is used by reference to the context in which the word is used by analysis of adjacent words and/or word groups with which it is used (Figure 2c, Figure 3, page 7, lines 15-42).

As to claim 6, Addison discloses step of subjecting said textual data to analysis with respect of subject matter comprising use of algorithms adapted to determine a degree of the sense in which a word is used by reference to a database dictionary of synonyms and synonym sets whereby identification of word sense is not prevented variations in language use as between the instructions and the database (page 10, lines 47-54).

As to claim 7, Addison discloses the step of establishing a reference or index database based on textual and other data from the original database (index database based on concept, page 5, lines 45-49, Figures 2a-d, page 7, lines 46-48) and which is to form a searchable virtual database for subject matter identification (identify concept, page 10, lines 15-18) and in which identified textual subject matter or concepts are stored in a compact data format (page 10, lines 15-18).

As to claim 8, Addison discloses a method for data management permitting selective access to a database by subject and/or data grouping (query text document by concept, Figure 1,

Art Unit: 2166

page 5, line 35, lines 45-46, page 10, lines 23-24), characterized by the step of data matching by reference to textual data subject matter (concept query, page 5, page 38, lines 45-46).

As to claim 9, Addison discloses said step of providing instructions for data matching to selectively access the database (accept query and execute searches, Figure 1, page 6, line 42).

As to claim 10, Addison discloses said step of subjecting said textual data to analysis with respect to subject matter being adapted to identify single concepts (use least frequency word sense for query (single concept), page 10, lines 30-33) in said instructions and in said database and being adapted to seek matches there-between (obtain list of document, page 10, lines 30-33).

As to claim 11, Addison discloses said step of matching said instructions with said data items comprising identifying one or more text locations within said database where matches with respect of said single concept are located (page 13, lines 10-12).

As to claim 12, Addison discloses said step of subjecting said textual data to analysis with respect to subject comprising use of algorithms adapted to determine a degree of the sense in which a word is used by reference to the context in which the word is used by analysis of adjacent words and/or word groups with which it is used (Figure 2c, Figure 3, page 7, lines 15-42).

As to claim 13, Addison discloses step of subjecting said textual data to analysis with respect of subject matter comprising use of algorithms adapted to determine a degree of the sense in which a word is used by reference to a database dictionary of synonyms and synonym sets whereby identification of word sense is not prevented variations in language use as between the instructions and the database (page 10, lines 47-54).

As to claim 14, Addison discloses the step of establishing a reference or index database based on textual and other data from the original database (index database based on concept, page 5, lines 45-49, Figures 2a-d, page 7, lines 46-48) and which is to form a searchable virtual database for subject matter identification (identify concept, page 10, lines 15-18) and in which identified textual subject matter or concepts are stored in a compact data format (page 10, lines 15-18).

As to claim 15, Addison discloses the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means (page 7, lines 5-7) and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data (page 7, lines 8-11).

As to claim 16, Addison discloses a method for data management permitting selective access to a database by subject and/or data grouping (query text document by concept, Figure 1, page 5, line 35, lines 45-46), the method comprising:

a) providing at least one database to which access is to be provided by subject or data grouping(access/index document by concept, Figure 2, page 7, lines 46-47);

b) providing data processing means adapted to provide access to said database (natural language/concept query, page 5, lines 38-41);

c) providing access instruction means adapted to permit instructions to be provided to said data processing means for said access, and causing same to instruct said data processing means accordingly (accept query and execute searches, Figure1, page 6, line 42); and

d) causing said data processing means to match said instructions with data items stored in said database to permit said matched data items to be identified for retrieval (results of text searching are retrieved and displayed, page 5, lines 50-52);

characterized by

e) said step of causing said access instruction means to instruct said data processing means being accompanied by the steps of data processing of said instructions and either then or previously of said database data or of a reference portion thereof to facilitate said matching of said instructions with said data items (query textual data is processed for natural language query, Figure 6, page 12, lines 50-51);

f) said data processing of said instructions and of said database data comprising the steps of: i) taking textual data from said instructions and from said database (capture natural language query from user, Figure 6, page 12, lines 54-57); ii) subjecting said textual data to analysis with respect to subject matter by cross-referencing the textual content thereof with respect to the corresponding textual content of an indexed reference text database or lexical dictionary adapted to facilitate word sense disambiguation (page 7, lines 15-42); and iii) identifying a degree of

Art Unit: 2166

limitation of word sense by reference to said additional textual data of said reference text database whereby, a degree of textual pre-analysis for subject indexing and matching purposes is provided (Figure 2c, Figure 3, page 7, lines 15-42, page 9, lines 33-41).

As to claim 17, Addison discloses the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means (page 7, lines 5-7) and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data (page 7, lines 8-11).

As to claim 18, Addison discloses the step of subjecting textual data from said instructions also to at least one step of statistical text analysis by said data processing means and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data (page 5, lines 42-44, lines 50-52, page 7, lines 30-36).

As to claim 19, Addison discloses a method for data management permitting selective access to a database by subject and/or data grouping (query text document by concept, Figure 1, page 5, line 35, lines 45-46) characterized by

the step of causing database access instruction means instructions to data processing means to be accompanied by the step of data processing of said instructions and either then or previously of said database or a reference portion thereof to facilitate said matching (query

Art Unit: 2166

textual data is processed for natural language query, Figure 6, page 12, lines 50-51), said data processing comprising

the steps of taking textual data from said instructions and from said database (capture natural language query from user, Figure 6, page 12, lines 54-57) and

subjecting said textual data to analysis by subject matter with cross-referencing of textual content with that of an indexed reference text database or lexical dictionary adapted to facilitate word sense disambiguation (page 7, lines 15-42), and

identifying, a degree of limitation of word sense by reference to said additional text of said reference text database whereby a degree of textual pre-analysis for subject indexing and matching purposes is provided (Figure 2c, Figure 3, page 7, lines 15-42, page 9, lines 33-41).

As to claim 20, Addison discloses the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means (page 7, lines 5-7) and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data (page 7, lines 8-11).

As to claim 21, Addison discloses a method for data management permitting selective access to a database by subject and/or data grouping (query text document by concept, Figure 1, page 5, line 35, lines 45-46), the method comprising:

a) providing at least one database to which access is to be provided by subject or data grouping (access/index document by concept, Figure 2, page 7, lines 46-47);

Art Unit: 2166

b) providing data processing means adapted to provide access to said database (natural language/concept query, page 5, lines 38-41);

c) providing access instruction means adapted to permit instructions to be provided to said data processing means for said access, and causing same to instruct said data processing means accordingly (accept query and execute searches, Figure1, page 6, line 42); and

d) causing said data processing means to match said instructions with data items stored in said database to permit said matched data items to be identified for retrieval (results of text searching are retrieved and displayed, page 5, lines 50-52);
characterized by

e) the step of subjecting textual data from said instructions and/or from said database also to at least one step of statistical textual analysis by said data processing means (page 5, lines 42-44, lines 50-52, page 7, lines 30-36), in combination with at least one step of linguistic analysis by cross-referencing the textual data to a linguistic textual database (Figure 5, page 10, lines 47-54), said statistical and linguistic text analysis steps being adapted to provide successive refinement steps with respect to the textual content of said textual data for matching purposes (page 7, lines 2-4).

As to claim 22, Addison discloses the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means (page 7, lines 5-7) and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data (page 7, lines 8-11).

As to **claim 23**, Addison discloses a method for data management permitting selective access to a database by subject and/or data grouping (query text document by concept, Figure 1, page 5, line 35, lines 45-46), the method comprising:

a) providing at least one database to which access is to be provided by subject or data grouping (access/index document by concept, Figure 2, page 7, lines 46-47);

b) providing data processing means adapted to provide access to said database (natural language/concept query, page 5, lines 38-41);

c) providing access instruction means adapted to permit instructions to be provided to said data processing means for said access, and causing same to instruct said data processing means accordingly (accept query and execute searches, Figure 1, page 6, line 42); and

d) causing said data processing means to match said instructions with data items stored in said database to permit said matched data items to be identified for retrieval (results of text searching are retrieved and displayed, page 5, lines 50-52);

characterized by

e) said step of causing said access instruction means to instruct said data processing means being accompanied by the step of causing said data processing means to search a reference or index portion of or associated with said database to facilitate said matching of said instructions with data items (using query concept and concept indexing for data retrieve, page 7, lines 46-48, page 10, lines 47-54, page 12, lines 45-46, lines 50-51);

f) said reference or index portion of or associated with said database having been prepared from said database data by a method comprising the steps of: i) taking textual and/or other data from said database (input document, filter text, Figure 2a); ii) subjecting said textual and/or other data to analysis with respect to the textual content (parse document, extract sentence, morphological/syntactic/semantic analysis, Figure 2b-d) thereof; iii) adopting modifications and/or elements of said textual data resulting from said analysis for said reference or index, said modifications and/or elements being adapted to permit more precise textual matching with search instructions (page 5; lines 45-46, page 6, lines 21-25).

As to claim 24, Addison discloses said analysis of said textual data comprising text parsing (Figure 2a, page 7, lines 46-58).

As to claim 25, Addison discloses said step of analysis of said textual data comprising word frequency analysis (page 14, lines 7-9).

As to claim 26, Addison discloses by said analysis of said textual data comprising document structure parsing (parse hypertextual document, Figure 2a, page 5, lines 29-31).

As to claim 27, Addison discloses Addison discloses the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means (page 7, lines 5-7) and adapted to provide a preliminary

Art Unit: 2166

or subsequent refinement step with respect to the textual content of said textual data (page 7, lines 8-11).

As to claim 28, Addison discloses a method for data management permitting selective access to a database by subject and/or data grouping (query text document by concept, Figure 1, page 5, line 35, lines 45-46), characterized by

the step of causing database access instructions means instructions to data processing means to cause data processing means to search a reference or index portion of or associated with said database to facilitate said matching (using query concept and concept indexing for data retrieve, page 7, lines 46-48, page 10, lines 47-54, page 12, lines 45-46, lines 50-51),

said reference or index portion of or associated with said database having been prepared from database data by a method comprising subjecting said textual data to analysis with respect to textual content (parse document, extract sentence, morphological/syntactic/semantic analysis, Figure 2b-d), and adopting modifications and/or elements of the textual data resulting from said analysis for said reference or index to permit more precise textual matching with search instructions (page 5, lines 45-46, page 6, lines 21-25).

As to claim 29, Addison discloses analysis of said textual data comprising text parsing (Figure 2a, page 7, lines 46-58).

As to claim 30, Addison discloses step of analysis of said textual data comprising word frequency analysis (page 14, lines 7-9).

As to claim 31, Addison discloses analysis of said textual data comprising document structure parsing (parse hypertextual document, Figure 2a, page 5, lines 29-31).

As to claim 32, Addison discloses Addison discloses the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means (page 7, lines 5-7) and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data (page 7, lines 8-11).

Related Prior Arts

The following list of prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Flank; Sharon et al., US 6944611 B2, "Method and apparatus for digital media management, retrieval, and collaboration", (...incorporates a glossary management tool that makes it easy for each client to customize terminology to the needs of a particular business).
- de Hita; Carolina Rubio et al., US 6081774 A, "Natural language information retrieval system and method", (...An information retrieval system that represents the content of a language-based database being searched as well as the user's natural language query,... The development system and the retrieval system

Art Unit: 2166

morphologically, syntactically and linguistically analyze the data base and the natural language query, respectively, to generate the one or more database keywords and query keywords representing the content of the database and the natural language query, respectively).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shew-Fen Lin whose telephone number is 571-272-2672. The examiner can normally be reached on 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shew-Fen Lin
Patent Examiner

Art Unit 2166
April 10, 2006


MOHAMMAD ALI
PRIMARY EXAMINER